

WHAT IS CLAIMED IS:

- 1     1. A computer implemented method for provisioning Broadband service in a  
2 Point-to-Point Protocol over Ethernet (PPPoE) network, comprising:  
3                 establishing a Plain Old Telephone System (POTS) connection between  
4                 a Broadband modem and a remote server;  
5                 receiving from said remote server via said POTS connection using  
6                 Dual-Tone Multi-Frequency (DTMF) tones, a domain name associated with a  
7                 Broadband Service Node (BSN); and  
8                 establishing a PPPoE session using said domain name.
  
- 1     2. The method of claim 1, wherein said establishing step comprises authenticating  
2                 said Broadband modem for said PPPoE session.
  
- 1     3. The method of claim 1, wherein said establishing step comprises:  
2                 transmitting a request for configuration details from said Broadband  
3                 modem to said BSN having said domain name, where said request is  
4                 transmitted over a PPPoE network; and  
5                 receiving configuration details from said configuration server.
  
- 1     4. The method of claim 1, further comprising, prior to said receiving step, the step  
2                 of transmitting a configuration request from said Broadband modem to said  
3                 remote server using DTMF tones.
  
- 1     5. The method of claim 1, wherein said receiving comprises further acquiring from  
2                 said remote server via said POTS connection using DTMF tones, a user  
3                 identifier.
  
- 1     6. The method of claim 5, wherein said establishing comprises transmitting said  
2                 user identifier as a username to establish said PPPoE session.



- 1       15. A computer implemented method for provisioning Broadband service in a  
2                  Point-to-Point Protocol over Ethernet (PPPoE) network, comprising:  
3                          establishing a Plain Old Telephone System (POTS) connection between  
4                          a Broadband modem and a remote server;  
5                          receiving from said remote server via said POTS connection using  
6                          Dual-Tone Multi-Frequency (DTMF) tones, a domain name associated with a  
7                          Broadband Service Node (BSN);  
8                          transmitting a request for configuration details from said Broadband  
9                          modem to said BSN having said domain name, where said request is  
10                         transmitted over a PPPoE network;  
11                         receiving configuration details from said configuration server;  
12                         configuring said Broadband modem using at least part of said  
13                         configuration details; and  
14                         transmitting at least part of said configuration details to a client  
15                         computer coupled to said Broadband modem to enable said client computer to  
16                         configure itself.
- 1       16. A computer implemented method for provisioning Broadband service in a  
2                  Point-to-Point Protocol over Ethernet (PPPoE) network, comprising:  
3                          answering at a remote server a Plain Old Telephone System (POTS)  
4                          call placed from a Broadband modem to said remote server;  
5                         determining a telephone number from which said POTS call was placed  
6                         by said Broadband modem;  
7                         looking-up a domain name of a Broadband Service Node (BSN)  
8                         associated with said telephone number;  
9                         transmitting said domain name and said telephone number to said  
10                         Broadband modem using Dual-Tone Multi-Frequency (DTMF) tones.
- 1       17. The method of claim 16, wherein said determining step uses Automatic  
2                         Number Identification (ANI) to determine said telephone number.

- 1       18. The method of claim 16, further comprising, prior to said determining step, the  
2           step of receiving a configuration request from said Broadband modem, where  
3           said request is transmitted using DTMF tones.
- 1       19. A system for provisioning broadband service in a Point-to-Point Protocol Over  
2           Ethernet (PPPoE) network, comprising:  
3              a least one client computer;  
4              a remote server coupled to a Public Switched Telephone Network  
5              (PSTN) and configured to communicate using DTMF tones;  
6              a Broadband modem coupled to said client computer and said PSTN,  
7              said Broadband modem including a memory comprising:  
8                  instructions for establishing a Plain Old Telephone System  
9                  (POTS) connection over said PSTN between said Broadband  
10                 modem and said remote server;  
11                  instructions for receiving from said remote server via said  
12                 POTS connection using Dual-Tone Multi-Frequency (DTMF)  
13                 tones, a domain name associated with a Broadband Service  
14                 Node (BSN);  
15                  instructions for transmitting a request for configuration  
16                 details from said Broadband modem to said BSN having said  
17                 domain name, where said request is transmitted over a PPPoE  
18                 network; and  
19                  instructions for receiving configuration details from said  
20                 configuration server.
- 1       20. The system of claim 19, further comprising:  
2              a Digital Subscriber Line Access Multiplexor (DSLAM) coupled between  
3              said Broadband modem and said BSN;  
4              an Asynchronous Transfer Mode (ATM) network coupled between said  
5              DSLAM and said BSN; and

6                   a Broadband Remote Access Server (BRAS) coupled between said  
7                   ATM network and said single configuration BSN.

1       21. The system of claim 19, further comprising:  
2                   multiple Broadband Service Nodes (BSNs) coupled to said modem,  
3                   where each of said BSNs is associated with a different domain name; and  
4                   an authentication server coupled to each one of said multiple BSNs.

1       22. The system of claim 21, wherein said multiple BSNs are coupled to the  
2                   Internet.

3       23. The system of claim 19, further comprising a POTS switch coupled between  
4                   said Broadband modem and said PSTN.

5       24. A computer program product for use in conjunction with a computer system for  
6                   provisioning broadband service in a Point-to-Point Protocol Over Ethernet  
7                   (PPPoE) network, the computer program product comprising a computer  
8                   readable storage and a computer program stored therein, the computer  
9                   program comprising:

10                  instructions for establishing a Plain Old Telephone System  
11                   (POTS) connection between a Broadband modem and a remote server;

12                  instructions for receiving from said remote server via said POTS  
13                   connection using Dual-Tone Multi-Frequency (DTMF) tones, a domain  
14                   name associated with a Broadband Service Node (BSN);

15                  instructions for transmitting a request for configuration details  
16                   from said Broadband modem to said BSN having said domain name,  
17                   where said request is transmitted over a PPPoE network; and

18                  instructions for receiving configuration details from said  
19                   configuration server.